

WELL SUMMARY

Location ID: BIM-15-305 Field Representative(s): G. Contaldo, C. Werden

Northing: 229884.04 Easting: 410430.31

Date Started: 30 March 1989 Date Completed: 14 April 1989

Drilling Method: Mud/Air-Foam Rotary Drilling Contractor: Larjon

Driller: T. Crawford

Total Depth Borehole: 325.10' Total Depth Well Casing: 320.6'

Total Depth Surface Casing: 290'

Diameter Well Casing: 4 inch Diameter Surface Casing: 8 inch

Length of Bottom Blank: 5'

Type of Screen: 10' Regular Strength 0.02 slot

Screen Interval: 305.0' to 315.3'

Water First Detected: 290.0' Water Level Open Borehole: 262.45'

Water Level Cased Borehole: 262.10'

EZ Mud use: 57 gallons

Quik-Foam use: 1.5 gallons

Estimated Water use: 10,908 gallons used during drilling
-4,937 gallons recirculated

5,971 gallons introduced into borehole

Well Casing:

4in x 3ft SCD 40 PVC:
4in x 5ft SCD 40 PVC: 1
4in x 10ft SCD 40 PVC: 24
4in x 20ft SCD 40 PVC:
Total SCD 40 PVC pipe: 245 ft

stock SS centralizer:
custom SS centralizer: 1
4"x2' SS locking riser: 1
4" SS locking cap: 1
4" SS female cap: 1

4in x 3ft SCD 5 SS pipe:
4in x 5ft SCD 5 SS pipe: 1(stool)
4in x 10ft SCD 5 SS pipe: 2
4in x 20ft SCD 5 SS pipe: 2
Total SCD 5 SS pipe: 65 ft

4in x 5ft SCD 10 SS pipe:
4in x 10ft SCD 10 SS pipe:
4in x 20ft SCD 10 SS pipe:
Total SCD 10 SS pipe: 0 ft

Well Completion:

| | |
|---------------------------|-----------|
| 100# bags 16/40 sand: | 6 bags |
| 100# bags 10/20 sand: | 0 bags |
| 100# bags 8/14 sand: | 3 bags |
| 100# bags 8/20 sand: | 4.5 bags |
| 94# bags cement: | 45 bags |
| 5 gal. buckets bentonite: | 0 buckets |
| 50# bentonite powder: | 5 bags |
| Benseal: | 1 bag |
| EZ Mud: | 2 cups |

Surface Casing:

| | |
|----------------------------|----------|
| 94# bags cement: | 100 bags |
| 50# bags bentonite powder: | 9 bags |

Pertinent Field Notes:

03/03/89 Drilled 0'-50' with mud rotary (EZ Mud polymer). Installed fence.

03/31/89 Drilled 50'-110' with EZ mud rotary.

04/01/89 Drilled 110'-180' with EZ mud rotary.

04/02/89 Drilled 180'-240' with EZ mud rotary.

04/03/89 Drilled 240'-270' with EZ mud rotary; ash-flow tuff encountered at 256'.

04/04/89 Drilled 270'-290' with EZ mud rotary, installed surface casing to 290'; pressure grouted surface casing-grout settled 40' below ground surface; 0-290' using 12 1/4 inch tricone bit.

04/05/89 Set-up BE rig over borehole.

04/06/89 Completed grouting surface casing to ground level.

04/10/89 Drilled 290'-325' with air-foam rotary; water first detected at 290'. Water level rose to 262.45' indicating artesian conditions; 290'-325' using 7 7/8 inch tricone bit.

04/11/89 Installed well casing, sand pack, and uppermost plug (pumped).

04/12/89 Installed sand above plug and first load of grout to 50' below ground surface.

04/13/89 Installed second load of grout to ground level and poured pad.

04/14/89 Developed well using bailer.

- 04/28/89